



Safe Drinking Water for Small Communities

Safe drinking water and good health are critically linked

Center for Disease Control 1999–2000 data:

- 39 Waterborne disease outbreaks
 - 2,068 ill (122 hospitalized)
 - 2 deaths
- 18 of the 39 outbreaks linked to non-federally regulated water systems

How water is delivered in our state*

- **Group A water systems – 4,300 serving 82% of population**
- **Group B water systems – 12,500 serving 2% of population**
- **Private wells – 200,000+ wells serving 10% of population**
- **Unknown or lacking information – 6% of population**

Overall Goal

Assure safe and reliable drinking water to people being served by Group B water systems.

Overall Objective

Work with local health officials to develop better information regarding Group B water systems.

Specific Information

- **The number of systems statewide**
- **Condition of systems**
- **Knowledge of person(s) operating the system**
- **Compliance with water quality requirements**

Overview

- **Increased local capacity**
- **Status of the Group B inventories and evaluations**
- **Issues Identified and the significance of the problems**
- **Recommendations**

Enhanced Local Capacity

- **Establish or expand drinking water programs at the local level**
- **Establish local point of contact with purveyors**
- **Increase technical assistance to purveyors**

Approach

- **Inventory Group B systems with 5-14 connections**
- **Field evaluate the status of the systems**
- **Educate purveyors about water quality monitoring requirements**
- **Provide technical assistance**

Results (Jan - Sept 2002)

Targeted Group - 3379 Systems

- **118 systems added to database**
- **1468 Water Facility Inventory Forms updated**
- **1330 site visits conducted**

Issues Found

(based on 1330 visits)

- **Inadequate water quality monitoring (38%)**
- **Lack of sealed well caps (22%)**

Improperly sealed well cap without proper vent



Well Seals

Properly sealed well head with a proper vent



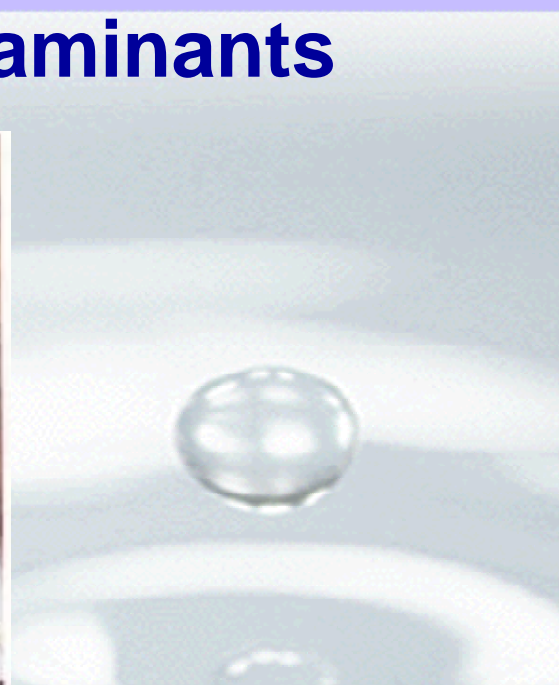
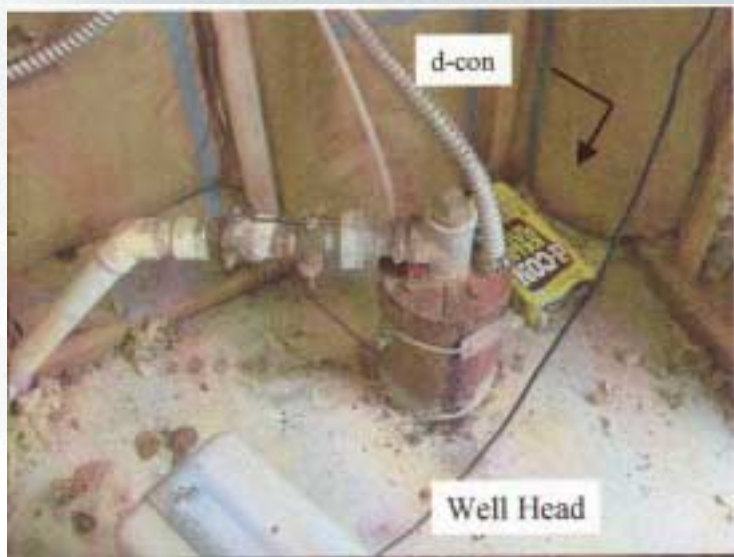
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(based on 1330 visits)

- Inadequate water quality monitoring (38%)
- Lack of sealed well caps (22%)
- Biological and chemical contaminants located within 100 ft. of source (24%)

DRINKING WATER

Potential Contaminants

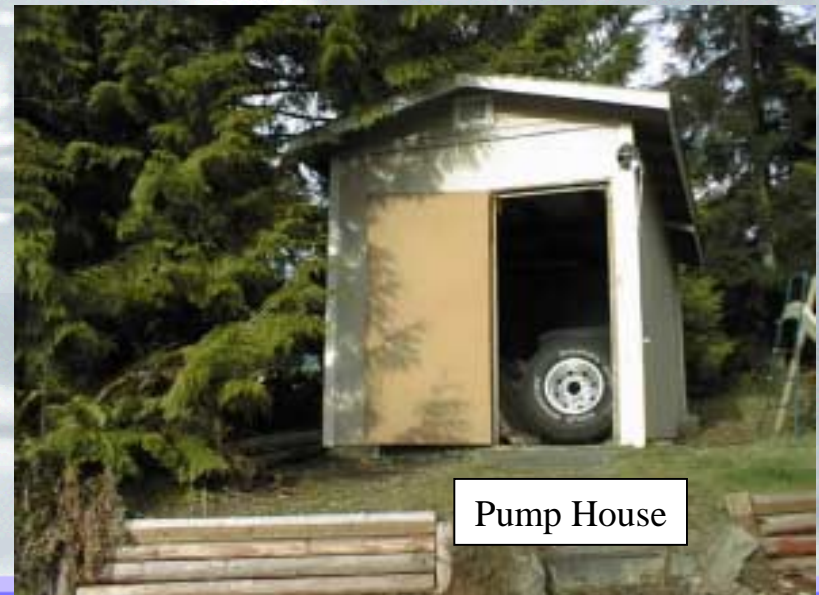


Goat droppings



Composting pile near wellhead

Potential Contaminants



Issues Found

(based on 1330 visits)

- Inadequate water quality monitoring (38%)
- Lack of sealed well caps (22%)
- Biological and chemical contaminants located within 100 ft. of source (24%)
- Known or obvious risk of wellhead covered by flood water (3%)
- Lack of sampling taps (31%)

Other Unsafe Conditions Found

- **Moved from a groundwater source to a lake source without approvals**
- **Unsafe sources - dug wells and springs**

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**Dug Well not properly constructed/
sealed.**



**Creek source with no filtration or chlorine
residual monitoring**



**Spring Box and surfacing water in a pasture
for cattle**

Other Unsafe Conditions Found

- **Absentee property owners**
- **Operators lacking knowledge/experience or resources to operate systems**
- **Evidence of vandalism**
- **Open storage reservoirs**

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Storage Reservoir open to contamination

Benefits – Enhanced Safety

- **Increased knowledge of the conditions and operations of Group B systems**
- **Developed relationships- putting a face on government for owners/operators**
- **Provided technical assistance to operators**
- **Significant improvements to systems**

Recommendations

- 1. Continue to recognize safe drinking water as a core public health program**
- 2. Maintain new local capacity for Group B drinking water programs**
- 3. Continue investment in public health protection**
 - **Just a start**
 - **Other target systems to evaluate**
 - **Follow-up technical assistance & compliance**
 - **Increased communication and education**



Questions